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# WFS709TP Guest Access with Corporate Proxy

Network administrators often implement secure guest wireless access alongside their secure corporate wireless access. In many companies there is a requirement to force guest traffic through a proxy server. An existing proxy server is the obvious solution for examining visitor's traffic, however it is onerous for visitors to manually configure a proxy, and it is easy for them to make a mistake.

This document describes an implementation of a secure guest wireless access solution which automates proxy implementation for the guests.

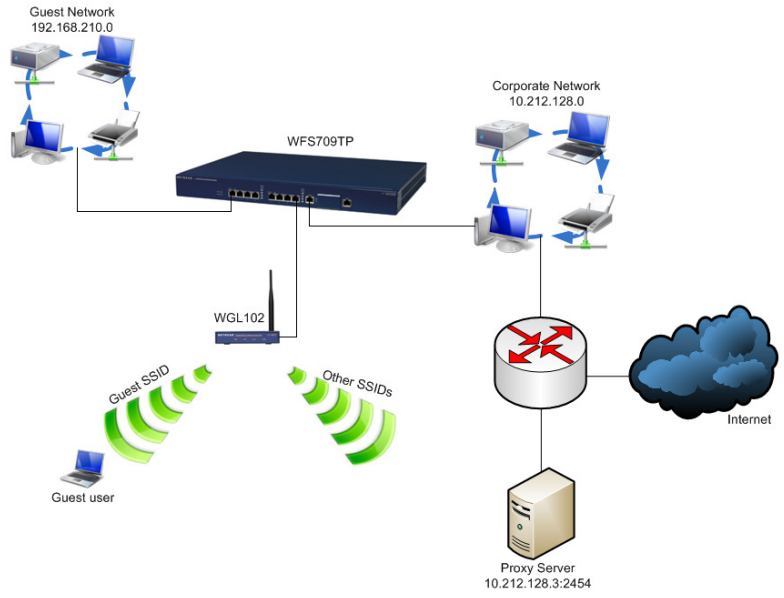
## 1. Overview of Solution

Visitors join the 'guest' SSID broadcast by the access point and are given a DHCP address. The DHCP server is configured to point to a WPAD.DAT file for the guest in a DHCP option. The WPAD.DAT file contains the location of the proxy. Microsoft Internet Explorer and Firefox will pick up this WPAD.DAT file and set their proxy accordingly, through the use of the 'automatically detect my network settings' option within the browser.

Configuration steps:

1) Configure DHCP option 252
2) Create the WPAD.DAT file and upload it to the WFS709TP's Captive Portal
3) Configure HTTP proxy host settings in the WFS709TP's Captive Portal

## 2. Network Diagram

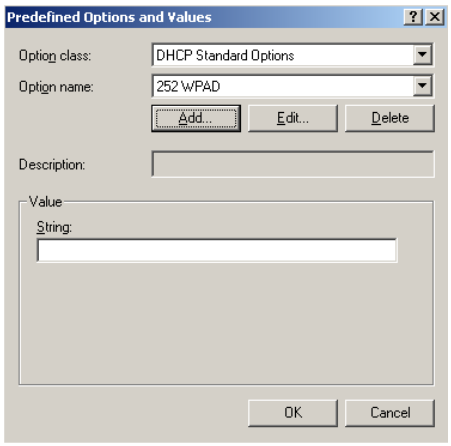


## 3. Configuring DHCP Option 252

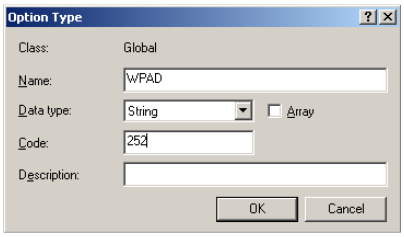
The description here applies to a Microsoft DCHP server.

First add Option 252 as a valid option (it is often not enabled).

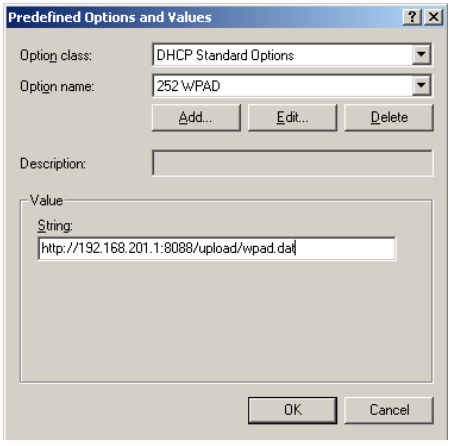
Go to **Start** -> **All Programs** -> **Administrative Tools** and click **DHCP.** Once this has opened, in the console tree, right-click the applicable DHCP server and click **Set Predefined Options**. The window below will appear.



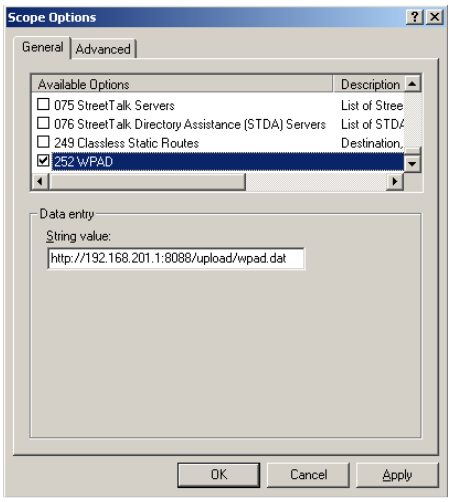

- The '**Predefined Options and Values**' window appears
- At this point, click Add




- In **Name**, type **WPAD**
- In **Data type**, select **String**
- In **Code**, type **252** and then click OK




- Once back at the '**Predefined Options and Values'** window, in the **String** field enter: http://<ip_address:port/location/wpad.dat> and press OK
- In this case, ip_address is the IP address of the guest VLAN on the WFS709TP. The port is 8088 as the web server runs on that port and the directory is /upload as captive portal pages are uploaded to that directory



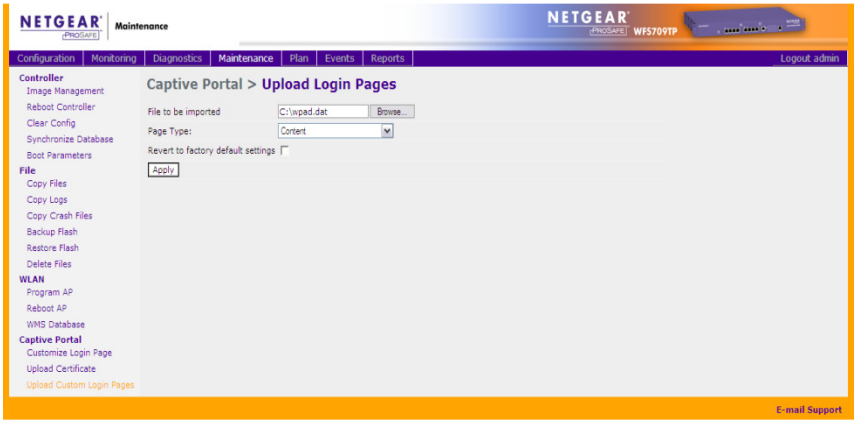

- Next, right click on **Scope Options** and click **Configure Options**
- Enable option 252 as per the screenshot on the right and click OK

## 4. Creating WPAD.DAT and uploading to WFS709TP

Example WPAD.DAT file:

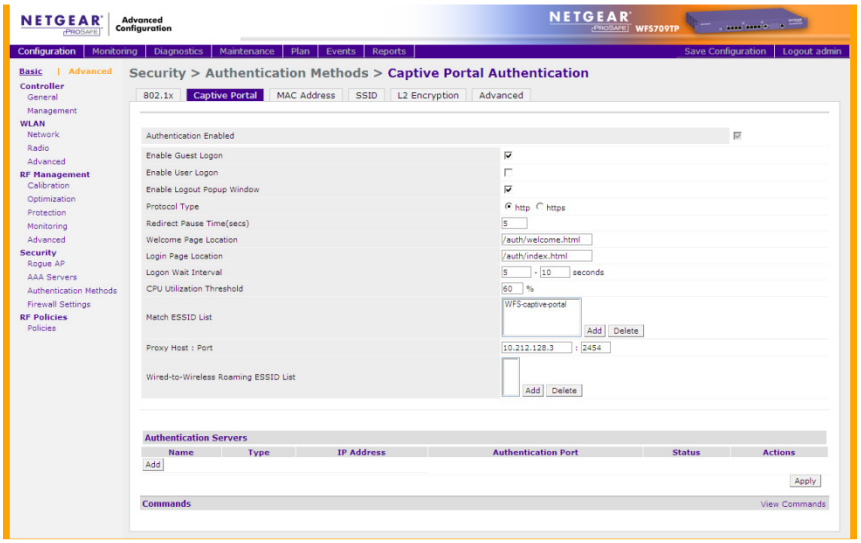
```
function FindProxyForURL(url, host)
{
        if (isInNet(myIpAddress(), "192.168.201.0", "255.255.255.0"))
                return "PROXY proxy.forwifi.com:8080";
            else
                return "DIRECT";
}
```

This file will be downloaded to the guest PCs and used by them to decide whether to use a proxy. The PC examines its local address. If it is in the subnet 192.168.201.0 then the proxy returned is as shown, with the port that the proxy is running on. In this case if the PC is in subnet 192.168.201.0 then a DNS entry in the local DNS servers point to the proxy, which has the DNS name of 'proxy.forwifi.com'.




- Upload the WPAD.DAT on the WFS709TP by going to **Maintenance** -> **Captive Portal** -> **Upload Custom Login Pages**
- Browse to the WPAD.DAT file and press Apply as shown

## 5. Configuring proxy server in WFS709TP




- Finally, add the proxy server address and port details on the WFS709TP
- Go to **Configuration** -> **Advanced** -> **Security** -> **Authentication Methods**
- Under the Captive Portal tab, enter in the relevant proxy server address and port and click Apply